

## ENGLISH KEY TO THE MESOAMERICAN GENERA OF THE PANICEAE

- 1(0). Disarticulation above the lower glume or at the spikelet base . . . 2  
 Disarticulation at the base of the primary branches or at the nodes of  
 the primary branches . . . . . 51
- 2(1). Rachis terminating in a spikelet . . . . . 3  
 Rachis terminating in an unmodified naked point or terminating in a  
 bristle . . . . . 46
- 3(2). Inflorescence a panicle . . . . . 4  
 Inflorescence a raceme . . . . . 43
- 4(3). Lower lemma with a central longitudinal groove . . . . . *Thrasya*  
 Lower lemma lacking a central longitudinal groove . . . . . 5
- 5(4). Primary branches with appressed secondary branches or reduced to a  
 fascicle of spikelets . . . . . 6  
 Primary branches with spreading secondary branches . . . . . 29
- 6(5). Lemma of upper floret with flat margins . . . . . 7  
 Lemma of upper floret with involute margins . . . . . 18
- 7(6). Second glume saccate or gibbose . . . . . 8  
 Second glume neither saccate nor gibbose . . . . . 9
- 8(7). Lemma of lower floret with a hyaline area at the base; spikelets laterally  
 compressed; second glume indumentum uncinat; internodes solid  
 or spongy . . . . . *Pseudechinolaena*  
 Lemma of lower floret consistent in texture; spikelets dorsiventrally  
 compressed or planoconvex; second glume indumentum not un-  
 cinat; internodes hollow . . . . . *Sacciolepis*
- 9(7). Primary branches with secund or distichous spikelets . . . . . 10  
 Primary branches with spikelets neither secund nor distichous . . 17
- 10(9). Ligule a membrane or a ciliate membrane . . . . . 11  
 Ligule a fringe of hairs . . . . . 14
- 11(10). First glume present . . . . . 12  
 First glume absent . . . . . 13
- 12(11). Spikelets adaxial; internodes solid or spongy; first glume encircling the  
 spikelet base; lemma of upper floret with margins of the same tex-  
 ture as the body . . . . . *Hymenachne*  
 Spikelets abaxial; internodes hollow; first glume not encircling the  
 spikelet base; lemma of upper floret with margins thinner in tex-  
 ture than the body . . . . . *Digitaria*
- 13(11). Spikelets adaxial . . . . . *Axonopus*  
 Spikelets abaxial . . . . . *Digitaria*
- 14(10). First glume present; primary branches with loosely arranged  
 spikelets . . . . . 15  
 First glume absent; primary branches with closely arranged  
 spikelet . . . . . *Axonopus*
- 15(14). First glume muticous; first glume encircling the spikelet base; second  
 glume muticous . . . . . *Scutachne*  
 First glume awned; first glume not encircling the spikelet base; second  
 glume awned . . . . . 16
- 16(15). Spikelets laterally compressed; lemma of upper floret hyaline to  
 membranous; stamens 2; callus not differentiated . . . . . *Reynaudia*



- Spikelets dorsiventrally compressed; lemma of upper floret cartilaginous; stamens 3; callus differentiated . . . . . *Chaetium*
- 17(9). First glume muticous; spikelets dorsiventrally compressed; main axis with distichous primary branches; pedicels truncate; second glume muticous . . . . . *Triscenia*
- First glume awned; spikelets laterally compressed; main axis with quaquaversal primary branches; pedicels discoid; second glume awned . . . . . *Arthropogon*
- 18(6). Lemma of upper floret differentiated at the apex . . . . . 19
- Lemma of upper floret not differentiated at the apex . . . . . 20
- 19(18). Internodes solid or spongy; leaf blades with an incised base; pedicels discoid; upper lemma becoming membranous at the apex . . . . . *Echinochloa*
- Internodes hollow; leaf blades truncate to rounded at the base; pedicels truncate; upper lemma conduplicate at the apex . . . . . *Acroceras*
- 20(18). Lemma of upper floret smooth, scabrous, striate, pitted, or papillate . . . . . 21
- Lemma of upper floret rugose . . . . . 28
- 21(20). Lemma of upper floret with basal scars or appendages; rachilla pronounced between the florets . . . . . 22
- Lemma of upper floret without basal modifications; rachilla not pronounced between the florets . . . . . 23
- 22(21). Spikelets pectinate or tightly spaced on the primary branches; first glume with bulbous-based setaceous hairs; pedicels discoid; pedicels flat to convex at the apex . . . . . *Echinolaena*
- Spikelets neither pectinate nor distinctly tightly spaced on the primary branches; first glume lacking bulbous-based setaceous hairs; pedicels cupuliform; pedicels concave at the apex . . . . . *Ichnanthus*
- 23(21). First glume present and awned . . . . . *Oplismenus*
- First glume present or absent but not awned . . . . . 24
- 24(23). Pedicels concave at the apex; spikelets adaxial . . . . . 25
- Pedicels flat or convex at the apex; spikelets abaxial . . . . . *Paspalum*
- 25(24). Ligule a membrane or a ciliate membrane . . . . . 26
- Ligule a fringe of hairs . . . . . 27
- 26(25). First glume present . . . . . *Panicum*
- First glume absent . . . . . *Axonopus*
- 27(25). First glume present; internodes hollow; main axis with distichous or secund primary branches . . . . . *Brachiaria*
- First glume absent; internodes solid or spongy; main axis with quaquaversal primary branches . . . . . *Axonopus*
- 28(20). First glume fused with the callus to form a cuplike structure . . . . . *Eriochloa*
- First glume not fused with the callus . . . . . *Urochloa*
- 29(5). Lemma of upper floret with flat margins . . . . . 30
- Lemma of upper floret with involute margins . . . . . 39
- 30(29). Primary branches with secund or distichous spikelets . . . . . 31
- Primary branches with spikelets neither secund nor distichous . . . . . 35
- 31(30). First glume muticous . . . . . 32
- First glume awned . . . . . 34
- 32(31). Ligule a membrane or a ciliate membrane . . . . . 33
- Ligule a fringe of hairs . . . . . *Scutachne*



- 33(32). Spikelets laterally compressed; rachilla pronounced between the florets; second glume indumentum uncinat; lemma of lower floret with a hyaline area at the base . . . . . *Pseudechinolaena*  
 Spikelets planoconvex; rachilla not pronounced between the florets; second glume indumentum not uncinat; lemma of lower floret consistent in texture . . . . . *Digitaria*
- 34(31). Ligule a membrane; rachilla pronounced between the florets; second glume gibbose; second glume indumentum uncinat; lemma of lower floret with a hyaline area at the base . . . . . *Pseudechinolaena*  
 Ligule a fringe of hairs; rachilla not pronounced between the florets; second glume neither saccate nor gibbose; second glume indumentum not uncinat; lemma of lower floret consistent in texture . . . . . *Reynaudia*
- 35(30). First glume present; sheaths rounded . . . . . 36  
 First glume absent; sheaths laterally compressed . . . . . *Anthaenantia*
- 36(35). First glume muticous; second glume less than or equal to the length of the lower floret . . . . . 37  
 First glume awned; second glume greater than the length of the lower floret . . . . . *Arthropogon*
- 37(36). Ligule a membrane; spikelets dorsiventrally compressed; lemma of upper floret with margins thinner in texture than the body . . . . . *Homolepis*  
 Ligule a fringe of hairs; spikelets laterally compressed; lemma of upper floret with margins of the same texture as the body . . . . . 38
- 38(37). Second glume 5-nerved; main axis with distichous primary branches; internodes neither viscid nor glaucous . . . . . *Rhynchelytrum*  
 Second glume 7-nerved; main axis with quaquaversal primary branches; internodes viscid . . . . . *Melinis*
- 39(29). Rachilla pronounced between the florets . . . . . 40  
 Rachilla not pronounced between the florets . . . . . 41
- 40(39). Rachilla with lateral appendages; primary branches with secund spikelets; lemma of upper floret with basal scars or appendages; spikelets adaxial; first glume encircling the spikelet base . . . . . *Ichnanthus*  
 Rachilla lacking lateral appendages; primary branches with spikelets neither secund nor distichous; lemma of upper floret without basal modifications; spikelets abaxial; first glume not encircling the spikelet base . . . . . *Isachne*
- 41(39). Spikelets dorsiventrally compressed or planoconvex; lemma of upper floret not differentiated at the apex; spikelets not divergent from the axis; first glume not inflated at the base . . . . . 42  
 Spikelets terete; lemma of upper floret differentiated at the apex; spikelets divergent from the axis; first glume inflated at the base . . . *Lasiacis*
- 42(41). Ligule a membrane or a ciliate membrane; lemma of upper floret smooth, striate, or papillate; pedicels cupuliform . . . . . *Panicum*  
 Ligule a fringe of hairs; lemma of upper floret rugose; pedicels discoid . . . . . *Urochloa*
- 43(3). Lower lemma with a central longitudinal groove; pedicels flat or convex at the apex; lemma of upper floret with involute margins . . . . . *Thrasya*  
 Lower lemma lacking a central longitudinal groove; pedicels concave at the apex; lemma of upper floret with flat margins . . . . . 44



- 44(43). Lemma of upper floret with basal scars or appendages; pedicels flat to convex at the apex ..... *Echinolaena*  
 Lemma of upper floret lacking basal scars or appendages; pedicels concave at the apex ..... 45
- 45(44). Lemma of lower floret with the area between the central nerve and the first lateral nerve thinner in texture than the rest of the structure; pedicels oblique to the spikelet base; main axis with distichous primary branches; second glume muticous ..... *Mesosetum*  
 Lemma of lower floret consistent in texture; pedicels perpendicular with the spikelet base; main axis with quaquaversal primary branches; second glume awned ..... *Arthropogon*
- 46(2). Lower lemma with a central longitudinal groove; spikelets adaxial; main axis winged ..... *Thrasya*  
 Lower lemma lacking a central longitudinal groove; spikelets abaxial; main axis not winged ..... 47
- 47(46). Lemma of lower floret with a hyaline area at the base; second glume chartaceous to indurate; second glume 13 – 23-nerved ..... *Setariopsis*  
 Lemma of lower floret consistent in texture; second glume hyaline to membranous; second glume less than 13-nerved ..... 48
- 48(47). Palea of lower floret with nerves pronounced but not winged; bristles scabrous; lemma of lower floret not keeled ..... 49  
 Palea of lower floret with nerves pronounced into obvious wings; bristles smooth; lemma of lower floret keeled ..... *Ixophorus*
- 49(48). Pedicels concave at the apex; lemma of upper floret rugose; first glume encircling the spikelet base ..... 50  
 Pedicels flat or convex at the apex; lemma of upper floret smooth, striate, or papillate; first glume not encircling the spikelet base ..... *Paspalum*
- 50(49). Main axis with distichous primary branches ..... *Paspalidium*  
 Main axis with quaquaversal primary branches ..... *Setaria*
- 51(1). Second glume present; stamens 3; inflorescence linear or oblong... 52  
 Second glume absent; stamens 2; inflorescence lanceolate or ovate . . *Reimarochloa*
- 52(51). Second glume more than 0.1 times spikelet length; pedicels with glabrous apices; cleistogamous inflorescence absent; lemma of upper floret dull ..... 53  
 Second glume less than 0.1 times spikelet length; pedicels with hairy apices; cleistogamous inflorescence present; lemma of upper floret shiny ..... *Paratheria*
- 53(52). Fascicles with 1 – 6 spikelets; spikelets not obviously opposite a flared bract ..... 54  
 Fascicles with 4 spikelets; spikelets opposite a flared bract ..... *Anthephora*
- 54(53). Disarticulation at the nodes of the main axis or at the base of the inflorescence; main axis with distichous or secund primary branches; leaf blades acute to rounded at the apex ..... *Stenotaphrum*  
 Disarticulation at the base of the primary branches; main axis with quaquaversal primary branches; leaf blades caudate to acuminate at the apex ..... 55
- 55(54). Callus flared to form a discoid receptacle ..... *Cenchrus*  
 Callus not flared to form a discoid receptacle ..... *Pennisetum*



## SPANISH KEY TO THE MESOAMERICAN GENERA OF THE PANICEAE

- 1(0). Desarticulación arriba de la gluma inferior o en la base de la espiguilla ..... 2  
 Desarticulación en la base de la ramificación primaria o en los nudos de la ramificación primaria ..... 51
- 2(1). Raquis terminando en una espiguilla ..... 3  
 Raquis terminando en una punta desnuda no modificada o terminando en una cerda ..... 46
- 3(2). Inflorescencia una panícula ..... 4  
 Inflorescencia un racimo ..... 43
- 4(3). Lema inferior con una cavidad central longitudinal ..... *Thrasya*  
 Lema inferior sin una cavidad central longitudinal ..... 5
- 5(4). Ramificaciones primarias con las ramificaciones secundarias adpresas o reducidas a un fascículo de espiguillas ..... 6  
 Ramificaciones primarias con las ramificaciones secundarias abiertas ..... 29
- 6(5). Lema del flósculo superior con márgenes planos ..... 7  
 Lema del flósculo superior con márgenes involutos ..... 18
- 7(6). Segunda gluma sacciforme o gibosa ..... 8  
 Segunda gluma no sacciforme ni gibosa ..... 9
- 8(7). Lema del flósculo inferior con un área hialina en la base; espiguillas comprimidas lateralmente; segunda gluma con indumento uncinado; entrenudos sólidos o esponjosos ..... *Pseudechinolaena*  
 Lema del flósculo inferior consistente en textura; espiguillas comprimidas dorsiventralmente o planoconvexas; segunda gluma con indumento no uncinado; entrenudos huecos ..... *Sacciolepis*
- 9(7). Ramificaciones primarias con espiguillas secundifloras o con espiguillas dísticas ..... 10  
 Ramificaciones primarias con espiguillas ni secundifloras ni dísticas ..... 17
- 10(9). Ligula una membrana o una membrana ciliada ..... 11  
 Ligula una fimbria de pelos ..... 14
- 11(10). Primera gluma presente ..... 12  
 Primera gluma ausente ..... 13
- 12(11). Espiguillas con orientación adaxial; entrenudos sólidos o esponjosos; primera gluma encerrando la base de la espiguilla; lema del flósculo superior con márgenes no más delgados en textura que el cuerpo ..... *Hymenachne*  
 Espiguillas con orientación abaxial; entrenudos huecos; primera gluma no encerrando la base de la espiguilla; lema del flósculo superior con márgenes más delgados en textura que el cuerpo ..... *Digitaria*
- 13(11). Espiguillas con orientación adaxial ..... *Axonopus*  
 Espiguillas con orientación abaxial ..... *Digitaria*
- 14(10). Primera gluma presente; ramificaciones primarias con espiguillas dispuestas laxamente ..... 15  
 Primera gluma ausente; ramificaciones primarias con espiguillas dispuestas ordenadamente ..... *Axonopus*